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Multiple intelligences, gender, and leadership effectiveness in male-dominated versus gender-balanced military units: A review of the literature

Prepared for Defence R&D Canada – Toronto by:

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The scientific or technical validity of this Contract Report is entirely the responsibility of the contractor and the contents do no necessarily have the approval or endorsement of Defence R&D Canada.

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Abstract

This report consists of a review of the literature on effective leadership within the context of the military. More specifically, task-oriented, person-oriented, and transformational leadership are discussed as they pertain to some of the personal characteristics (i.e., androgyny, multiple intelligences, and behavioural flexibility) possessed by effective leaders. A consideration of gender implications and military culture provides a framework within which such personal attributes can be contextualized. The utility of such a conceptualization lies within its ability to consider a multitude of variables in the assessment of effective military leadership.

Résumé

Le présent rapport examine la littérature sur le leadership efficace dans le contexte militaire. Plus précisément, il se penche sur les leaderships orienté vers la tâche, orienté vers les personnes et de nature transformationnelle, puisqu'ils sont liés à certaines des caractéristiques personnelles (p. ex., androgynat, intelligence multiple et souplesse de comportement) des leaders efficaces. L'étude de la problématique hommes-femmes et de la culture militaire offre un cadre où de tels attributs personnels peuvent être contextualisés. L'utilité de ce genre de conceptualisation repose sur sa capacité d'envisager une multitude de variables dans l'évaluation d'un leadership militaire efficace.

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Executive summary

This report examines the factors that contribute to effective leadership in the military. An inclusive conceptualization of leadership is presented that includes a discussion of the task-oriented, person-oriented, and transformational components of leadership. The leadership research that has been carried out is reviewed with particular attention to that conducted in the military context. Some of the personal characteristics that have been found to be associated with effective leadership are also discussed in detail. The notion of multiple intelligences is elaborated upon with a focus on the practical, emotional, and social intelligences. There has been a renewed interest in these intelligences as researchers are recognizing the need to identify intelligences beyond the commonly referenced general/cognitive intelligence, or what is typically referred to as IQ. Each of these intelligences is discussed as it relates to the military setting. An examination of behavioural flexibility is subsequently presented, as the ability to adapt to environmental factors is increasingly recognized among scholars as a critical leadership capability. An explanation of androgyny theory provides a link between task-oriented leadership, person-oriented leadership, transformational leadership, and behavioural flexibility. Androgynous individuals have personalities that are characterized by high levels of both instrumental (agentic/task-oriented) and expressive (affiliative/person-oriented) gender-role traits, which may make them ideal leadership candidates.

Insights into some of the situational variables presented by the military context are put forth in addition to an examination of leadership concepts, multiple intelligences, behavioral flexibility, and androgyny. These include a consideration of the implications that a male-dominated versus a more gender-balanced context may play with respect to the role of women, the token status typically accorded women who are immersed in male-dominated settings, and the detrimental assumptions individuals hold with regard to such women. Jobholder schemas, occupational segregation, gender stereotyping, negative attitudes, and biased evaluations of performance are considered along with their implications.

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Sommaire

Le rapport examine les facteurs qui contribuent à un leadership efficace dans le monde militaire. Une conceptualisation inclusive du leadership y est présentée et inclut une discussion sur les composantes dites orientée sur la tâche, orientée sur les personnes et de nature transformationnelle du leadership. Les recherches existantes sur le leadership sont passées en revue, et ce, en portant une attention particulière à celles inhérentes au contexte militaire. Certaines des caractéristiques personnelles qui se sont avérées être associées au leadership efficace sont aussi traitées en détails. La notion de l'intelligence multiple est commentée abondamment, avec un accent mis sur l'intelligence pratique, émotionnelle et sociale. On a constaté une résurgence de l'intérêt à l'égard de ces types d'intelligence, car les chercheurs reconnaissent le besoin d'aller au-delà de l'habileté intellectuelle générale à laquelle on fait communément référence et que l'on appelle le Q.I. Chacune de ces formes d'intelligence est scrutée dans l'optique d'un contexte militaire. Les auteurs présentent ensuite une étude de la souplesse de comportement, puisque la capacité de s'adapter aux facteurs environnementaux est de plus en plus reconnue par les chercheurs comme étant une compétence essentielle au leadership. Une explication de la théorie de l'androgynat permet de faire le lien entre le leadership orienté sur la tâche, le leadership orienté sur les personnes, le leadership transformationnel et la souplesse de comportement. Les individus androgynes possèdent des personnalités qui sont fortement caractérisées par des traits sexués tant opérants (agent/orienté vers la tâche) qu'expressifs (affiliation/orienté vers les personnes), ce qui peut faire d'eux des leaders idéaux.

Une réflexion sur certaines des variables situationnelles du contexte militaire est offerte dans ce rapport, accompagnée d'une étude des concepts relatifs au leadership, à l'intelligence multiple, à la souplesse de comportement et à l'androgynie. Cette réflexion comporte aussi une analyse des implications qu'un contexte à prédominance masculine, par rapport à un contexte respectant davantage l'équilibre entre les sexes, pourrait avoir en ce qui concerne le rôle des femmes, le statut symbolique typiquement accordé aux femmes immergées dans des milieux à prédominance masculine, et les postulats préjudiciables adoptés par certaines gens face à ces femmes. Enfin, le rapport passe également en revue les schémas relatifs aux titulaires de poste, la discrimination professionnelle, les stéréotypes fondés sur le sexe, les attitudes négatives et les évaluations biaisées de rendement, et précise leurs implications.

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1. Introduction

The issue of whether effective leadership is more dependent upon the situation, the particular characteristics of the leader, or the relationship between a leader and a follower has been the focus of much debate (see Sternberg & Vroom, 2002). As this review indicates, it is likely that the situation, the person, and the relationship between them all make substantial contributions in determining when a leader will be effective. Researchers have identified numerous traits, skills, and competencies in their quests to determine those that are most pertinent to the success of a leader, many of which are important in the dynamic geopolitical, technological, economic, socio-cultural, socio-political, and demographic environment of the military (Boyce, Gade, Zaccaro, & Klimoski, 2000). For example, effective military leadership most certainly requires adaptive leaders who possess intelligence in a number of different domains and the behavioural flexibility to utilize such intelligence when called for by the situations in which they find themselves. The shift toward efforts such as peacekeeping and peacemaking will require competencies and skills beyond those required in combat situations. As the military diversifies, so must its leaders. The identification of these requisite intelligences, competencies, and abilities will serve to further the efforts of the military and help to integrate disadvantaged groups for the betterment of the Canadian Forces.

As more minorities (e.g., women, visible/ethnic minorities, and aboriginal people) enter into the Canadian Forces and move up through the ranks, the nature of leader-subordinate relationships will be altered. It is necessary, therefore, to understand how the characteristics that leaders possess interact with those of their followers and the nature of the culture or situation to determine what constitutes effective leadership. The purpose of this review is to examine the research pertaining to these issues. Specifically, we review research on: (1) the types of leadership characteristics that have been shown to be related to effective military leadership, and (2) how the culture of the setting (male-dominated vs. gender-balanced) and the gender of the leader affect leader-subordinate relationships and the leader's effectiveness.

2. Conceptualizations of Leadership

2.1 Task- and Person-Oriented Leadership

The term "leadership" has been defined in terms of traits, behaviours, influence, interactions, role relationships, position, and perception of others regarding legitimate influence (Yukl, 1981). The existence of a plethora of leadership definitions necessarily creates a need for researchers to describe what they mean by "leadership" prior to conducting related research. One pervasive and long-standing approach to defining leadership views leadership as having both task-oriented and person-oriented components. The distinction between task- and person-orientation is commonly made in a number of leading leadership theories.

In their "Situational Leadership Theory," Hersey and Blanchard (1988) discuss the differences between task and relationship behaviour. Task behaviour is defined as "the extent to which the leader engages in spelling out the duties and responsibilities of an individual or group. These behaviors include telling people what to do, how to do it, when to do it, where to do it, and who is to do it" (p. 172). The researchers describe relationship behaviour as "the extent to which the leader engages in two-way or multi-way communication. These behaviors include listening, facilitating, and supportive behaviors" (p. 172).

House and Mitchell's "Path-Goal Theory" includes directive leadership and supportive leadership. Directive leadership is exhibited by a leader "who lets subordinates know what is expected of them, gives specific guidance as to what should be done and how it should be done, makes his [sic] part in the group understood, schedules work to be done, maintains definite standards of performance and asks that group members follow standard rules and regulations" (1974, p. 3). Supportive leadership is evidenced "by a friendly and approachable leader who shows concern for the status, well-being and needs of subordinates. Such a leader does little things to make the work more pleasant, treats members as his [sic] equals, and is friendly and approachable" (p. 4).

In the three-skill typology discussed by Katz (1955) and Mann (1965) for classifying managerial skills, the researchers identified the importance of technical and human relations skills. Technical skill "refers to the ability to use pertinent knowledge, methods, techniques, and equipment necessary for the performance of specific tasks and activities, and for the direction of such performance" (Mann, 1965, p. 73). Human relations skills "refer to the ability to use pertinent knowledge and methods for working with people and through people. They include an understanding of general principles of human behavior, particularly those principles which involve the regulation of interpersonal relations" (Mann, 1965, p. 74).

Stogdill (1974) discussed a number of studies that include task and person components to leadership, termed "initiation of structure" and "consideration." A leader using an initiating structure style places a strong emphasis on the tasks to be accomplished,

while a leader using a consideration style is concerned with his/her followers. The distinction between a task- and person-orientation has existed for many decades and resonates with researchers and practitioners alike who uphold that effective leadership entails competencies with respect to both people and tasks.

2.2 Transformational Leadership Behaviour

A more recent conceptualization of leadership is derived from Bass' "Transformational Leadership Theory" (Bass, 2002). Transformational leadership behaviour consists of four components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 2002). "Idealized Influence" pertains to the leader as a role model for his or her followers. Such leaders are admired, respected, and trusted, and followers want to emulate them (Bass, 2002). "Inspirational Motivation" points to the ability of leaders to motivate and inspire followers by providing meaning and challenge to the work followers do. Team spirit, enthusiasm, and optimism are typically displayed (Bass, 2002). "Intellectual Stimulation" is realized as leaders stimulate their followers into being innovative and creative, while expanding their followers' use of their competencies. Assumptions are questioned and problems are reframed as followers try new approaches (Bass, 2002). "Individualized Consideration" encourages a leader's followers and colleagues to reach higher levels of potential as these leaders pay attention to each individual follower's needs for achievement and growth by acting as a coach or mentor. Individual differences are recognized and individuals are listened to and encouraged to learn in a supportive environment (Bass, 2002). The literature suggests that a transformational style of leadership is one of the most effective ways to lead (e.g., Lowe, Kroeck, & Sivasubramaniam, 1996).

2.3 Defining Leadership in the Military

When one examines the military's construal of leadership, similar dimensions emerge. In reviewing the US Army's definition of leadership, Horvath, Williams, Forsythe, Sweeney, Sternberg, McNally, and Wattendorf found that leadership is conceptualized as "an interpersonal-influence process in which direct and indirect means are used to get others to accomplish the organization's goals by providing purpose, direction, and motivation" (1994, p. 20). Such a definition, which includes an interpersonal element as well as an emphasis on goal-directed behaviour, recognizes the person- and task-orientation that leaders need to possess to be effective, as well as the motivational elements associated with transformational leadership. The researchers further indicated that "the doctrine assumes that leadership processes are qualitatively different at various levels in the military hierarchy. Hence, different doctrinal manuals are employed at the different levels" (p. 20). In addition, the researchers distinguished between the interpersonal, intrapersonal, and organizational levels of leadership experience. The distinction between various levels in the military hierarchy implies a need for more multifaceted competencies at the higher levels of the organizational hierarchy, as the environment becomes increasingly complex and places greater demands on leaders.

Wenek (2003) has examined leadership within the context of the Canadian Forces (CF) and has proposed a similar conceptualization focusing on strategic versus direct leadership. Wenek defines Canadian Forces leadership as "influencing others to accomplish the mission lawfully, ethically, and professionally, while ensuring member well-being and commitment, building an efficient and cohesive team, and improving the CF as an organization" (2003, p. 95). Such a definition is indicative of a task-orientation which seeks to accomplish a mission, and illustrative of a person-orientation, which seeks to ensure member well-being, while simultaneously incorporating the transformational components of Inspirational Motivation and Individualized Consideration. Another definition, provided by the Department of National Defence, describes leadership as "the art of influencing human behavior to accomplish a mission in the manner desired by the leader" (Loughlin & Arnold, 2002). Although not as explicit as the examples provided above, such a definition recognizes the need for interpersonal interaction and goal-directed behavior as well as the transformational leader's ability to influence others.

3. Research on Leadership in the Military

3.1 Leadership Effectiveness in the Military

The importance of effective leadership in the military, and more specifically, the Canadian Forces, has been touted by many (e.g., Day, Newsome, & Catano, 2002; Laughlin & Arnold, 2002; Livingstone, Nadjiwon-Foster, & Smithers, 2002; Paquet, Hambley, & Kline, 2003). But what is it that we mean when we say "effective leadership"? According to Yukl and Van Fleet (1982), the answer is somewhat dependent upon the context. They sought to determine effective leadership behavior for US military cadets and Air Force officers. In both combat and noncombat situations, a performance emphasis, inspiration, role clarification, and criticism/discipline were identified as important. In dynamic and uncertain combat situations, planning and problem solving were deemed important. Although unrelated to group performance, consideration was also seen as important for the maintenance of effective leader-subordinate relations, particularly in noncombat situations.

In their analysis of the roles required by senior military leaders, Paquet, Hambley, and Kline (2003) proposed that military leaders should adopt the roles of visionary, change agent, champion and advocate, coach and mentor, and peacemaker and peacekeeper. In order to be effective in such roles, the researchers felt that military leaders needed to possess social intelligence, flexibility, technical knowledge and skills, cognitive abilities, creative problem-solving abilities, trust and integrity, communication, commitment, courage, cross-cultural skills, and the ability to deal effectively with social complexity. The researchers also discussed the necessity of considering the recent social, political, economic, and demographic changes which have forced the Canadian Forces to re-evaluate their position within the global community and how leadership can successfully adapt to such changes.

Shamir and Ben-Ari (2000) have argued that "due to some fundamental changes in the environments of contemporary military establishments, the role of military leaders is becoming more cognitively, socially and emotionally complex" (p. 54). They have called for the development of an appropriate theory or model of leadership for the emerging military organization. Researchers are also beginning to look at past practices and how such practices can be improved upon. According to Hedlund, Sternberg, Horvath, Forsythe, and Snook (1999), the US Army devotes extensive resources to leadership development, which includes institutional training, self-development, and operational assignments. They indicate that much of the emphasis in leader development is placed on institutional training and less on operational assignments that "provide opportunities for officers to learn how to apply the leadership knowledge codified in doctrine and taught in the Army school system" (1999, p. 1).

3.2 Transformational Leadership Behaviour in the Military

The impact of transformational leadership behaviour on effectiveness has been investigated in the context of the military. According to the research conducted by Atwater and Yammarino (1993) on a sample of men and women in military training, a leader's personal attributes (e.g., traits, thinking styles) predict the leadership ratings that he or she receives. The researchers found that the relevant predictors differed according to whether subordinates or superiors provided ratings. For instance, personal attributes such as intelligence and emotional coping accounted for a significant portion of the variance in subordinates' ratings of both transformational and transactional leadership. The variance accounted for by superior ratings with respect to these attributes was not significant. Conformity and behavioural coping were found to relate to superior ratings of transformational and transactional leadership, but did not account for a significant portion of the variance in subordinate ratings.

In their study of cadets entering the Virginia Military Institute (VMI), Avolio, Dionne, Atwater, Lau, Camobreco, Whitmore, and Bass (1996) utilized a multi-source strategy to measure leadership behaviour and emergence. The researchers found positive relationships between transformational leadership criteria and physical fitness, hardiness, and moral reasoning. Research conducted by Atwater, Dionne, Avolio, Camobreco, and Lau (1996) supports these promising findings as "superior ratings of transformational leadership" were among the list of best overall predictors of cadet leader effectiveness. The researchers utilized the Multi-Factor Leadership Questionnaire (MLQ) Form 5R (Bass & Avolio, 1990) and suggested that transformational leadership training could increase military leader effectiveness.

In their sample of platoon leaders and sergeants, Bass and Avolio (1999) found transformational leaders to be more effective in garrison and in combat readiness mission training. Similarly, Bass and Avolio (2000) found that if superiors, peers, and subordinates saw their leaders as transformational, their platoons were seen as more effective both in home station and in simulated combat arenas. Additionally, the researchers found that the level of transformational leadership shown by platoon leaders in garrison predicted their performance at the Joint Readiness Training Center (JRTC). The platoon sergeant's transformational leadership was also found to predict performance at JRTC. The Inspirational Leadership, Intellectual Stimulation, and Individualized Consideration components of transformational leadership were found to play significant roles.

In their examination of transformational leadership within the Canadian Forces, Livingstone, Nadjiwon-Foster, and Smithers (2002) discussed the positive individual and organizational outcomes associated with such leadership behaviour. The researchers cited a number of studies documenting the effectiveness of transformational leadership in military and para-military environments. Loughlin and Arnold (2002) indicated that transformational leadership behaviour in the military is more positively associated with extra effort on behalf of subordinates, satisfaction with leadership, and leader effectiveness perceptions. In discussing the Department of National Defence strategic framework for defence planning and decision-making, the researchers maintained that two long-term strategic objectives point to a potentially

critical role for transformational leadership in the Canadian Forces. Loughlin and Arnold (2002) acknowledged that although none of the studies they cited used the Canadian Forces as a sample, there are no substantive reasons for why Canadian results should differ from other results. Nonetheless, they indicated that the replication of such findings within the Canadian Forces would be a fruitful area for further research (see also Bradley & Charbonneau, 2004).

4. Personal Characteristics of Effective Leaders

In addition to the styles or behaviours that make a leader effective, the literature has also identified many traits or personal characteristics that are associated with effective leadership. Among these are intelligence, behavioural flexibility, and androgyny. Each of these is discussed below.

4.1 Intelligence: Multiple Intelligences, Leadership, and the Military

Research with respect to intelligence has recently been expanded upon and applied to the leadership domain. Researchers maintain that intelligence is important to effective leadership, but how do they describe and define intelligence? In an attempt to determine what constitutes intelligence, Sternberg, Conway, Ketron, and Bernstein (1981) sought the views of experts and laypersons. Three experiments, which featured the spontaneous generation of intelligence conceptions and the rating of various behaviours and descriptions, were designed to elicit these views. Experts' conceptions of intelligence consisted of verbal intelligence, problem-solving ability, and practical intelligence, while laypersons' conceptions of intelligence consisted of practical problem-solving ability, verbal ability, and social competence. Thus, discrepancies exist in how intelligence is defined and described (see Sternberg, Grigorenko, & Bundy, 2001). Spearman (1970), in his two-factor theory, described intelligence as consisting of a "general factor" or "*g*" and a "specific factor," which he denotes as "*s*." Research by Gardner (1983) suggests that logical-mathematical, linguistic, spatial, bodily-kinesthetic, musical, and interpersonal intelligences are independent. Research suggests the existence of other forms of intelligence and the need to clarify the nature of these intelligences as well as the notion of multiple intelligences (e.g., Taub, Hayes, Cunningham, & Sivo, 2001).

The practical, emotional, and social intelligences, in particular, have gained the attention of leading researchers in the field of psychology. Bass (1998) suggests that cognitive, emotional, and social intelligence all contribute to transformational leadership behaviour. In his discussion of the findings that positively relate the emotional and social intelligences to transformational leadership, Bass (2002) concluded that research supports such relationships and that such results have been obtained for managers and executives, community and government leaders, and military officers, cadets, and midshipmen.

4.1.1 Practical Intelligence

Sternberg has described practical intelligence as that "aspect of successful intelligence that is relevant to adaptation, shaping, and selection in everyday life" (2002, p. 11). He emphasizes an approach to practical intelligence that focuses on tacit knowledge, which is "what one needs to know to succeed in a given environment…" and includes five main characteristics, namely, that it

is "(a) generally acquired on one's own, (b) usually unspoken and often implicit, (c) procedural in nature, (d) not readily articulated, and (e) directly related to practical goals that people value" (Sternberg, 2002, p. 11). Sternberg (1985) and his colleagues have categorized tacit knowledge as consisting of managing people, managing tasks, managing self, and managing career. They maintain that these abilities to manage are particularly important for real-world occupational success (see Sternberg & Vroom, 2002).

4.1.2 Practical Intelligence and Leadership

Researchers have investigated the role that practical intelligence may play with respect to leadership. Colonia-Willner (1998) found best-performing older bank managers to have high levels of tacit knowledge and concluded that the Tacit Knowledge Inventory for Managers (TKIM; Wagner & Sternberg, 1991a, 1991b) predicted managerial skill. Research conducted by Atwater (1992) indicated that practical intelligence accounted for unique variance in the prediction of leadership ratings. In their review of the literature with respect to practical intelligence, Sternberg, Forsythe, Hedlund, Horvath, Tremble, Snook, Williams, Wagner, and Grigorenko (1999) found that tacit knowledge exists in the stories that successful practitioners share about the lessons they learned in the process of performing their jobs. These stories provide rich insights about the practically oriented knowledge that practitioners are often unaware they have acquired. The researchers claim that individuals who are able to acquire and use tacit knowledge are more effective in their particular performance domain than others.

4.1.3 Practical Intelligence and Leadership in the Military

In their analysis of interviews with 81 US Army officers at the battalion, company, and platoon levels, Horvath, Forsythe, Sweeney, McNally, Wattendorf, Williams, and Sternberg (1994) found differences across levels in the quantity, structure, and content of tacit knowledge for military leadership. They found that tacit knowledge increased with level, that battalion commander tacit knowledge was more complex in structure than that of company and platoon commanders, and that categories of tacit knowledge varied across levels in their identity, relative frequency, and composition. The researchers maintained that the pattern of differences and similarities illustrate the experiential learning at each level. Self-management and credibility seemed to characterize the platoon leader level, balancing company and battalion-level interests was important in company commanders, and managing organizational change and communication distinguished the battalion commander level (Horvath, Forsythe, Sweeney et al., 1994). In their analysis of the practical knowledge of Army leaders, Hedlund, Sternberg, and Psotka (2000) found relationships between rank and tacit knowledge scores, which supports the assertion that tacit knowledge is related to experience.

In a representative sample of US lieutenants, captains, majors, and lieutenant colonels, it was found that officer experiences were more related at adjacent levels than nonadjacent levels of command and that meta-cognitive problem-solving skills distinguished more experienced officers from less experienced officers (Antonakis, Hedlund, Pretz, & Sternberg, 2002). However, Hedlund, Antonakis, and Sternberg (2002) caution that although tacit knowledge increases with experience, it is not simply experience itself that constitutes tacit knowledge. Tacit knowledge is characterized as learning from this experience and developing effective "schemas" for future use in similar situations. Occupying a particular military rank, therefore, does not guarantee a specific level of tacit knowledge.

Hedlund, Horvath, Forsythe, Snook, Williams, Bullis, Dennis, and Sternberg (1998) maintain that tacit knowledge can serve as a predictor of leadership effectiveness. The researchers found the Tacit Knowledge Inventory for Military Leaders (TKML) to be a better predictor of leadership effectiveness for military leadership personnel than measures of verbal reasoning ability, tacit knowledge for managers, and experience. Similarly, the findings of Hedlund, Forsythe, Horvath, Williams, Snook, and Sternberg (2003) suggest that domain-specific tacit knowledge explains individual differences in leadership effectiveness. In their study of military leaders, the researchers found that tacit knowledge scores correlated with ratings of military leadership effectiveness from either peers or superiors. Tacit knowledge scores were found to explain variance in military leadership effectiveness beyond a general verbal ability test and a test of tacit knowledge for managers.

Horvath, Williams, Forsythe, Sweeney, Sternberg, McNally, and Wattendorf (1994) suggest that because tacit knowledge can be reliably measured and is predictive of performance, such an approach can prove instrumental in the assessment, selection, and training of future military leaders. Horvath, Hedlund, Snook, Forsythe, and Sternberg (1998) uphold that the challenge in developing leaders is in enabling them to learn more effectively and efficiently from their experiences and suggest that encouraging the acquisition of tacit knowledge is one avenue for developing continuous learning in a volatile and complex environment.

4.1.4 Emotional Intelligence

There is strong consensus among researchers regarding the existence of another form of intelligence, namely, emotional intelligence (Bar-On, 1997; Caruso, Mayer, & Salovey, 2002; Ciarrochi, Chan, & Caputi, 2000; Goleman, Boyatzis, & McKee, 2002; Kobe, Reiter-Plamon, & Rickers, 2001; Morand, 2001; Tischler, Biberman, & McKeage, 2002; Van der Zee, Thijs, & Schakel, 2002). As discussed by Caruso, Mayer, and Salovey (2002), emotional intelligence has been conceptualized in two different ways (i.e., the ability model vs. mixed models). The ability model focuses on how emotions can facilitate thinking and behaviour, is skill-based, and has been empirically

validated (Caruso et al., 2002). Mixed models encompass the ability model, but also include many other traits and psychological attributes. Mixed models resonate with leaders and human resource professionals and some evidence for their predictive validity exists (Caruso et al., 2002). However, Caruso et al. argue that the ability model approach is preferable as "a mixed model approach to emotional intelligence offers little that is new to leadership theorists and practitioners… existing theories of leadership and personality models already describe the traits included in the mixed approach. An ability model of emotional intelligence offers something new: a means to understand how leaders manage their own emotions, and that of others, to get results" (2002, p. 63). Mayer and Salovey (1997) maintain that emotional intelligence, from an ability model perspective, requires the abilities to: perceive emotions, access and produce emotions to aid thought processes, understand emotions and emotional knowledge, and monitor emotions for the promotion of emotional and intellectual growth.

4.1.5 Emotional Intelligence and Leadership

Many researchers have investigated the relationship between emotional intelligence and leadership (e.g., Rozell, Pettijohn, & Parker, 2002; Wolff, Pescosolido, & Druskat, 2002; Wong & Law, 2002; Zugec & Korabik, 2003). George (2000) has stressed the importance of moods and emotions in the leadership process and calls for additional research concerning how leaders' moods and emotions influence their effectiveness as leaders. Watkin (2000) has indicated that the value of employees' actions can be optimized to realize higher growth, greater shareholder value, and sustainable competitive advantage if the emotional intelligence of leaders, managers, and employees is developed. Caruso et al. (2002) has claimed that emotional intelligence can facilitate the functions that a leader performs and has discussed why leaders need to be able to identify, use, understand, and manage emotions. Recently, increased importance has been placed on the emotional intelligence of leaders due to findings suggesting a link between transformational leadership behaviours and emotional intelligence (see Ashkanasy & Tse, 2000; Bass, 1998, 2002; Day, Newsome, & Catano, 2002; Goleman, 1995; Livingstone, Nadjiwon-Foster, & Smithers, 2002; Mandell & Pherwani, 2003; Sosik & Megerian, 1999).

4.1.6 Emotional Intelligence and Leadership in the Military

In their investigation of the emotional aspects of leadership in the Canadian Armed Forces, Ashkanasy and Dasborough (n.d.) discussed how military leaders have the ability to evoke emotions in their followers, how such an ability can affect military outcomes, and how such an ability can be misused by leaders. Their model, which is embedded in a military context, construes leadership behaviors as affective events, which generate emotional reactions in followers. It is through the management of followers' emotions that military leaders can achieve their objectives, as the affective responses of

followers will directly affect how they think and behave. Thus, leaders have the ability to arouse both positive and negative emotions within followers (Ashkanasy & Dasborough, n.d.). Ashkanasy and Dasborough (n.d.) also discussed the relationship between the use of emotions and transformational leadership. The researchers indicated that transformational leaders make use of their emotional intelligence in order to achieve their objectives. However, they cautioned that although emotional intelligence can be used to facilitate transformational leadership, it can also be used by Machiavellian leaders to disguise their real intentions.

In their discussion of the implications that emotional intelligence (EI) may have for the Canadian military, Day, Newsome, and Catano (2002) highlighted two criticisms. They maintained that "(1) There is a variety of unrelated definitions and measures of EI; and (2) There are unsubstantiated claims regarding the construct and criterion-related validity of EI" (pp. 21-22). The researchers pointed to the need for additional data concerning emotional intelligence as the findings currently available are inadequate to justify the use of emotional intelligence tests for selection or training purposes within the military.

Livingstone, Nadjiwon-Foster, and Smithers (2002), in their discussion of emotional intelligence and military leadership, adopted a similar view and directed researchers toward determining the nature of the link between emotional intelligence and military leadership. The researchers recommended that the Canadian Forces Leadership Institute concentrate their efforts with regard to emotional intelligence on construct validity, measurement issues, incremental validity, criterion-related validity, the varying degrees of emotional intelligence necessary for successful military leadership, and issues in selection and training.

4.1.7 Social Intelligence

Thorndike (1920) was the first to introduce the notion of social intelligence. Thorndike defined social intelligence as "the ability to understand and manage men and women, boys and girls – to act wisely in human relations" (p. 228). Other researchers have also investigated the construct of social intelligence (e.g., Erez, 1980; Legree, 1995; Zaccaro, Foti, & Kenny, 1991).

According to Zaccaro (2002) social intelligence reflects an ability to successfully engage in social awareness, social acumen, response selection, and response enactment. Social awareness and social acumen comprise a social perceptiveness component which "refers to a capacity to be particularly aware of and sensitive to needs, goals, demands, and problems at multiple system levels, including individual members, relations among members, relations among organizational subsystems, and interactions among a leader's constituent organization and other systems in the embedding environment" (Zaccaro, Gilbert, Thor, & Mumford, 1991, p. 321). Response selection and response enactment comprise a behavioural flexibility component (Zaccaro,

2002). The researchers argued that the "ability" dimension includes a strong degree of task-related competence as well as a corresponding competence in responding to very different situational demands.

4.1.8 Social Intelligence and Leadership

Zaccaro, Gilbert, Thor, and Mumford (1991) maintain that effective leaders possess social intelligence, which allows them to accurately perceive social requirements and select appropriate behavioural responses. They propose that leaders, as opposed to non-leaders, have more richly developed and more complex knowledge structures regarding people and situations, attend to and understand more quickly the critical social elements of organizational problems, and grasp more quickly the adaptive implications of social opportunities both within and outside the organizational environment.

Zaccaro (2002) discusses research indicating the importance of social intelligence and capabilities as determinants of leader emergence and effectiveness within organizations. He indicates that the ability to identify, construct, and follow paths in a dynamic social environment determines, in part, leadership performance. Hooijberg and Schneider (2001) point to the importance of human relations skills at the upper, middle, and lower-levels of management, skills which require the ability to create structure, interpret structure, and use structure, respectively. They stress the importance of demonstrating social intelligence for executive leaders.

Research by Zugec and Korabik (2003) provides additional insight into the relationship between social intelligence and leadership. In their study, social intelligence was associated with gender-role expressivity, gender-role instrumentality, task- and person-oriented leadership styles, task- and person-oriented leadership ability, and task- and person-oriented behavioural flexibility. The researchers concluded that social intelligence seems to encompass and require both a task- and person-orientation. Such a finding parallels Zaccaro's (2002) construal of social intelligence, as one would need to be cognizant of the social elements of the situation (person-orientation) and follow through with an appropriate response (task-orientation).

4.1.9 Social Intelligence and Leadership in the Military

Parallels emerge when Zaccaro's notion of social intelligence is overlaid on the tacit knowledge and military leadership findings considered earlier. Zaccaro (1999, 2002) similarly points to the stratification of leader responsibilities and has developed a model of leadership that contains the similar and differing performance requirements that leaders are required to address at various levels within an organization.

Zaccaro (1999, 2002) specified two qualitative shifts in requirements and identified three organizational levels: the production level, the organizational

level, and the systems level. As one moves from the production to the systems level, the informational and social complexity that is required increases. Such social complexity causes social capacities to become critical leadership competencies (Zaccaro, 2002). Zaccaro (1999) argues that effective military leadership entails the utilization of various social competencies and maintains that behavioural flexibility, conflict management, persuasion, and social reasoning skills are critical for senior military leaders.

Paquet, Hambley, and Kline (2003), in their assessment of the competencies required of military leaders, also discussed the importance of the ability to operate in socially complex environments. Additionally, these researchers detailed the significance of social intelligence for military leadership in Canada. They indicated that two components of social intelligence (i.e., interactional complexity and social reasoning) are competencies that senior military leaders should possess as "these competencies allow leaders to attend to similarities and differences among social elements and to efficiently acquire and effectively utilize social information" (p. 46).

In their efforts to develop a measure of social intelligence, Zaccaro, Zazanis, Diana, and Gilbert (1995) found that the proposed measure was not significantly associated with general intelligence or with the Armed Services Vocational Aptitude Battery (ASVB). Such findings, which point to the existence of another form of intelligence, are similar to those discussed above with respect to practical intelligence.

4.2 Behavioural Flexibility

Behavioural flexibility has also been associated with effective leadership (e.g., Zaccaro, 1999). Epstein and Meier (1989) maintain that the key to constructive thinking may be flexible adaptation, which considers multiple needs. The need for executive leaders to demonstrate behavioural complexity, which refers to the ability of leaders to engage in various leadership roles in the organization, has been identified (Boal & Hooijberg, 2001; Hooijberg & Schneider, 2001). Research by Hall, Workman, and Marchioro (1998) indicates that behavioural flexibility is also important in leader emergence.

4.2.1 Behavioural Flexibility and Military Leadership

The ability to behave flexibly and shift from one role to another seems to be an important competency of military leaders. Hedlund, Sternberg, Horvath, Forsythe, and Snook (1999) have maintained that future army leaders will require the ability to be both flexible and adaptable in responding to increasingly complex and dynamic environments. The researchers also pointed to the necessity of being cognizant of the different perspectives on what constitutes effective military leadership. Superiors, subordinates, and experts may have differing opinions as to the superiority of some actions over

others. Thus, military leaders need to consider the possibility that different constituents will receive their actions differently. Hedlund, Sternberg, Horvath, Forsythe, and Snook maintained that leadership "requires considering the various contingencies involved with each situation and choosing from a flexible repertoire of knowledge a response that will likely lead to the desired outcome" (1999, p. 59).

Hooijberg, Bullis, and Hunt (1999), in discussing the development of military leadership and the various roles in which army officers need to engage, presented a behavioural complexity model of leadership. They maintained that the adaptability, readiness, and versatility of behavioural complexity are consistent with the requirements of the US Army's Force XXI leaders. The researchers proposed that "Army leaders who have a broad behavioral repertoire of leadership roles will be more likely to be perceived as effective than those army leaders who do not have a broad repertoire" and that "Leaders who vary the performance of their leadership roles depending on the level of the people they interact with and the particular mission they are engaged in, will be more effective than those who do not vary the performance of their leadership roles" (pp. 116-117).

Consistent with the practical and social intelligence literature, Hooijberg, Bullis, and Hunt (1999) have suggested that behavioural complexity increases as one moves up the organizational hierarchy. In addition, the researchers proposed a substantive shift in the concerns of leaders operating within these various levels. For example, at the highest level leaders focus on such things as overall structure, strategies, and organizational transformation (see also Wenek, 2003, on strategic leadership).

Gurstein (1999) has maintained that although the leadership characteristics required of peacekeepers are similar to those of national military leaders, the abilities required of each are somewhat different. For instance, abilities in mediation, conflict resolution, and support of civilian welfare are more critical to the peacekeeping military leader than the national military leader (Gurstein, 1999). Gurstein adds that the peacekeeping environment differs from the usual national forces environment and advocates for the identification of specific training requirements, as an orientation towards increased versatility will be required when leaders are expected to enact various roles.

In his discussion of the "new army," Yukl (1999) points to changing missions, new technology, budget reductions and downsizing, new forms of organization, demographic changes and diversity, changes in socio-cultural values, and changes with respect to cognitive skills. Such changes create a need for additional leadership competencies within the military, increase the need for training and development initiatives (Yukl, 1999), and create a significant need for flexible leadership.

4.3 Androgyny

Another characteristic of leaders that has been linked to their ability to be effective is androgyny. Androgynous individuals have personalities that are characterized by high levels of both instrumental (agentic/task-oriented) and expressive (affiliative/person-oriented) gender-role traits. According to androgyny theory, androgynous individuals: (a) possess a wider repertoire of behaviours, (b) are more behaviourally flexible, and (c) function more effectively than other individuals (Cook, 1985). These assumptions have not always been unequivocally supported. As a result, the differentiated additive model of androgyny has been put forth (Marsh, 1987; Marsh & Byrne, 1991). According to this model, the effects of instrumentality and expressivity are domain-specific, with gender-role instrumentality producing effects only in task-oriented or masculine stereotypic domains and gender-role expressivity producing effects only in person-oriented or feminine stereotypic domains. Research supporting this model has shown that instrumentality is positively correlated with capability in the task-oriented aspects of leadership like planning, organizing, and decision making. By contrast, expressivity is correlated with capability in the person-oriented aspects of leadership like listening and team building. Androgynous individuals, because they have both instrumental and expressive personality characteristics, possess leadership capabilities from both the task- and person-oriented domains (Korabik & Ayman, 1994).

A review of the literature reveals a link between androgyny and behavioural flexibility. Paulhus and Martin (1988) discuss psychological androgyny in their overview of current conceptions of interpersonal flexibility and Hall, Workman, and Marchioro (1998) suggest that androgyny is another way of operationalizing behavioural flexibility. In addition, Porter, Geis, Cooper, and Newman (1985) maintain that the behavioural flexibility associated with androgyny would be advantageous in a work setting when women and men are required to exchange ideas.

Further insight can be obtained by focusing more specifically on behavioural flexibility in the task-oriented and person-oriented domains. Such a focus is largely consistent with studies on androgyny (see Bem, 1974; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976), which suggest that the androgynous individual more often achieves effective functioning in both domains. According to Bem, Martyna, and Watson (1976), agentic "individuals of both sexes are high in independence but low in nurturance," whereas affiliative "individuals of both sexes are high in nurturance but low in independence. In contrast, androgynous individuals of both sexes are capable of being both independent and nurturant, both instrumental and expressive, both masculine and feminine" (p. 1022).

4.3.1 Androgyny and Leadership

The relationship between androgyny and leadership has been explored in a variety of studies (Korabik, 1982a and b; 1990; 1996; Korabik & Ayman, 1987; 1989; 1994; Porter, Geis, Cooper, & Newman, 1985). Much research has linked androgyny to leadership style. For example, research indicates that androgyny is related to a leadership style that incorporates both initiating

structure and consideration, with instrumentality being positively and significantly associated with initiating structure and expressivity being positively and significantly associated with consideration (Korabik, 1982a and b; 1990; 1996). Moreover, this research has demonstrated that androgynous individuals are more behaviourally flexible than non-androgynous individuals. In group settings, androgynous individuals were able to adopt the role of either a task-oriented or a person-oriented leader depending upon which role was missing.

Other research (Korabik, Ayman, & Purc-Stephenson, 2001) has supported a link between androgyny and transformational leadership behaviour. Leaders' levels of instrumentality were positively related to their self-ratings on all four subcomponents of transformational leadership (i.e., idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) and leaders' levels of expressivity were positively related to their self-ratings of idealized influence, inspirational motivation, and individualized consideration. An expressivity by organization type interaction with respect to intellectual stimulation was found. Low expressivity was related to higher self-ratings of intellectual stimulation in industrial settings, whereas high expressivity was related to higher self-ratings of intellectual stimulation in educational settings. Moreover, leaders in educational settings who were androgynous and reported using a transformational leadership style reported lower job stress and higher job satisfaction. Their subordinates also reported lower stress and higher satisfaction.

Other studies have focused on the relationship between instrumentality/expressivity and leadership ability or competence. Korabik and Ayman (1989) found that androgynous women managers conceptualized management as consisting of a combination of task- and person-oriented activities and their supervisors rated them as higher in overall effectiveness than women in other gender-role categories. In a later study, the researchers also found some support for the hypothesis that androgynous managers would be more effective than those in the other gender-role categories (Korabik & Ayman, 1994). Consistent with the differentiated additive model of androgyny, gender-role instrumentality was positively and significantly related to abilities in the task-oriented domain (e.g., problem solving, decision making, planning and organizing, and time management) and gender-role expressivity was positively and significantly related to abilities in the interpersonal domain (e.g., listening and interpersonal skills). Based on these findings, the researchers speculated that, as predicted by Marsh's differentiated additive androgyny model, the superiority of androgynous managers might not be evident on any one dependent variable. Thus, androgynous managers may not have an advantage in any one situation, but their performance should be better than that of other managers when assessed over a wide variety of situations (Korabik & Ayman, 1994).

4.3.2 Androgyny and Military Leadership

Only a few studies have investigated androgyny in the context of the military. When interpreting the findings from these studies, one must consider that the military has long been a male-dominated occupation. Research indicates that army men and women seem to be more similar than dissimilar in terms of personality traits (Rosen, 2000). This is consistent with other research (see Korabik, 1992) demonstrating that both men and women are likely to be agentic (i.e., high in instrumentality and low in expressivity) in male-dominated environments.

It is no surprise, therefore, that in a sample of army trainees, Dimitrovsky, Singer, and Yinon (1989) found that self-ratings of both likelihood of success and suitedness were higher for men and women who had higher levels of gender-role instrumentality (those who were agentic or androgynous) than they were for those low in instrumentality (those who were affiliative or undifferentiated). Men and women who were higher in instrumentality also had better self- and peer- ratings of success and suitedness than did those low in instrumentality. Officers' ratings, however, were found to favor agentic men and affiliative women.

Weber, Rosen, and Weissbrod (2000) investigated the relationship between gender-role orientation and psychological symptoms among army men and women. Their analyses revealed that socially desirable instrumental traits were related to better adjustment and that socially desirable expressive traits were unrelated to psychological symptoms. Psychological symptoms were, however, related to both unmitigated agency (i.e., an undesirable excess of instrumental characteristics) and unmitigated communion (i.e., an undesirable excess of expressive characteristics). These results are similar to those from research on nonmilitary samples (Bowen-Willer & Korabik, 1997; Kirso & Korabik, 1996; Korabik & McCreary, 1995), which indicates that desirable and undesirable gender-role characteristics produce differential outcomes. For example, such research demonstrates that leaders high in unmitigated agency are arrogant, hostile, overly domineering, and autocratic. They lack consideration for others and manage conflicts by dominance. Leaders high in unmitigated communion are overly expressive and exploitable. They lack a task-orientation, treat others in a smothering and intrusive manner and are overly obliging when managing conflicts. By contrast, androgynous leaders tend to be free of interpersonal problems, they use effective leadership styles (both task- and person-oriented as well as transformational), and utilize effective conflict resolution styles (i.e., integrating or win-win).

Although one can infer from some of the findings cited above that instrumentality has a greater impact on leadership effectiveness than expressivity, additional research directs attention to the benefits of expressivity within the military environment. For example, current military missions have increased in complexity as disaster relief and peacekeeping, which require caring and compassion, become increasingly important in the

military context. In support of this, Rosen (2000) maintains that both socially desirable instrumental and expressive traits (i.e., androgyny) characterize well-adjusted combat support troops and that these traits have positive implications for adaptability to a variety of missions, as these individuals are able to behave according to situational requirements. Weber, Rosen, and Weissbrod (2000) direct attention to the concept of "military cohesion" or "a form of group solidarity associated with the small combat unit, and thought to contribute to military readiness, mission success, and psychological survival on the battlefield" (p. 237). The researchers discuss two types of cohesion. The first type, horizontal cohesion, involves bonding among peers. The second type, vertical cohesion, involves supportive and caring leadership. In their meta-analysis, instrumentality was not associated with either horizontal or vertical cohesion. In stark contrast, an analysis of their data indicated that expressivity was a strong positive predictor of both types of cohesion. This finding suggests that the kind, understanding, and helpful behavior associated with expressivity may be adaptive to important aspects of military life.

5. Gender, Cultural Context, and Leadership

5.1 Women and Military Leadership

As discussed above, a leader's style and personality characteristics have an impact on his or her ability to be effective. In addition, women face many difficulties that are not faced by men when they occupy leadership positions (see Carli & Eagly, 2001; Hogue, Yoder, & Ludwig, 2002; Yoder, 2001). One of the most influential factors that impacts on the ability of women military leaders to be effective is the organizational culture in which they must operate.

5.1.1 Organizational Culture

Organizational cultures consist of beliefs and attitudes, values about what is important, norms about how things should be done, customs, and lifestyles (Mills & Tancred, 1992). In situations where a majority group has predominated for a long time, the culture that develops is defined by the prevailing group and embodies their values and suits their needs (Korabik, 1997). Research indicates that cultures that are more hostile to women exist in areas where men are more numerous (Korabik, 1997). For example, studies of attitudes towards women in the US Navy demonstrate that hostility towards women is more widespread in settings where they are atypical. Research has found that men in the medical/dental and administrative departments hold the most positive views toward service women, whereas men in the aviation, weapons, and engineering departments, where men are more numerous, are most likely to be opposed to women serving on Navy ships (Thomas & Greebler, 1983, as cited in Palmer & Lee, 1990).

Most certainly, a distinctive military culture exists with idiosyncratic elements like rank insignia, saluting, and a specific jargon. It has been labeled a combat-masculine-warrior culture to signify the large role that stereotypical masculine norms such as toughness and physical strength play (Dunivin, 1994; Weber, Rosen, & Weissbrod, 2000). This culture is characterized by a command and control ideology, hierarchical authority, bureaucracy, a fixed division of labour, standardized operations, and reliance on precise regulations (Shamir & Ben-Ari, 2000). Individuals in this culture must be willing to relocate often, to travel frequently, to be away from home for long periods of time, to work irregular hours, and to subject themselves to personal danger. Sub-cultures also exist in different branches of the CF (e.g., the Army) and in different areas (e.g., "fighter pilot culture" and "submarine culture") (Bradley, 1999).

Davis and Thomas (1998) specifically discussed the culture of the combat arms within the CF. They characterized combat arms as a setting that "has been defined by men and maintained to train and employ men" (p. 10). Here,

the "cultural (male) assumptions in relation to the accepted, expected, and/or 'appropriate' social and sexual behaviours of women create a systematic barrier to the objective evaluation of the performance of women in combat arms" (p. 24). Davis and Thomas (1998) also reported that women in the combat arms perceive a climate of hostility and non-acceptance that is different from the welcoming and inclusive atmosphere they experienced as Reservists.

5.1.2 Token Status

As outlined above, the problems that women leaders face escalate when they are in male-dominated settings. When the proportion of women's representation in a group is below 15%, they are accorded token status (Kanter, 1977). Tokenism does not, in and of itself, result in negative consequences. Problems only occur when the person who is a token is also a member of a low-status group (Yoder, 2002). Yoder (2002) contends that because women are typically accorded subordinate status and because gender serves as a status marker, the social context is different for token women than it is for token men. Research supports such an assertion as studies conducted at the US military academy at West Point have demonstrated that women cadets typically experience social isolation, enhanced visibility, additional performance pressures, and being relegated to peripheral non-leadership positions (Yoder, 1983, 1989; Yoder & Adams, 1984; Yoder, Adams, & Prince, 1983). These experiences are similar to the negative consequences that befall women in token positions in nonmilitary settings (Powell, 1993).

By contrast, because of the higher status that our society accords males, men who are tokens in female-dominated occupations (e.g., nursing, elementary school teaching, social work) are accepted rather than rejected by their colleagues and are more likely to be promoted than are women, even when the women's credentials are equivalent to theirs or higher (Yoder, 2002). This phenomenon has been termed the "glass escalator" (Williams, 1992) to distinguish it from the "glass ceiling" that women often experience (Powell, 1999).

Yoder (2002) contends that because the negative outcomes associated with tokenism are a result of under-representation combined with lower status, Kanter's (1977) solution of equal numerical representation is oversimplistic because it fails to recognize the status implications of gender. Yoder suggests that the full inclusion of women in male-dominated occupations and the reduction of negative tokenism outcomes can only be done effectively by taking gender status and stereotyping into account. Thus, she believes that changing the proportions of men and women in an occupational category will not be effective unless it occurs in conjunction with redefined occupational roles and status enhancement for women (Yoder, 2002).

5.1.3 Jobholder Schemas and Occupational Segregation

Stereotypes of various kinds help perpetuate the under-representation of women in the CF. One type of stereotype that serves this purpose is the jobholder schema. Jobholder schemas are stereotypes about what kinds of individuals are best suited for what kind of work (Perry, Davis-Blake, & Kulik, 1994). These schemas are generally unconscious, deeply ingrained, and highly resistant to change (Betz & Fitzgerald, 1987; Perry et al., 1994). Research demonstrates that children develop jobholder schemas early in life. For instance, by the time they are three years old, children develop a conceptual distinction between the types of occupations that are appropriate for men and women (Betz & Fitzgerald, 1987). Research indicates that parents, teachers, guidance counselors, and the media reinforce jobholder schemas, which help to determine the career choices that individuals make (Betz & Fitzgerald, 1987). For example, Tanner's (1999) findings suggest that the most influential factor in women's decision to enlist in the military is having friends and relatives with CF experience.

In the past, the military has been composed almost entirely of White men. The stereotypical member of the military is a man who has masculine attributes (e.g., strong, tough, dominant, and decisive) (Dunivin, 1994). Those who are viewed as not having these characteristics may be less likely to be recruited or selected for positions that are thought to require them (Perry et al., 1994). Likewise, individuals who view themselves as not having the characteristics associated with the typical "military man" may be less likely to pursue a military career. Additionally, people often choose to accept the roles that society has traditionally prescribed for them because they find such roles comforting and familiar (Korabik, 1997). In conjunction, these factors influence the number of qualified women that apply to the CF, the recruitment of qualified women, their assignment to different Military Occupational Classifications (MOCs) and their potential appointments as leaders.

Within the military, as in society as a whole, there exists considerable segregation with respect to jobs and job duties (Powell, 1999). For many years, the military was not considered to be an appropriate occupation for women and they were completely excluded from military service. Although the number of women in the CF has increased in recent years, women are still concentrated in certain specialties or "pink ghettos" that are viewed as more appropriate for them. For example, the proportions of women in the CF are highest in medical/dental (41.8%) and support (22.4%) units and lowest in combat arms (2.9%) (National Defence Minister's Advisory Board, 2000).

Research indicates that a disproportionate representation of people into various groups, occupations, or occupational sub-specialties is enough, in and of itself, to produce status differentials, as members of the minority group are accorded lower status based on the description of their social roles (Hoffman & Hurst, 1990). When few individuals from a sub-group hold certain types of

jobs, the stereotyped belief that there are "legitimate" and non-discriminatory reasons for them not to be in those jobs develops, which leads to the assumption that they are not capable of doing that type of work (Hoffman & Hurst, 1990). These beliefs perpetuate a vicious cycle that keeps the number of women who occupy leadership positions very low. In addition, they make it more likely that women leaders in male-dominated units and MOCs will have more difficulty legitimizing their authority than women in more gender-balanced settings.

5.1.4 Gender Stereotyping

In addition to jobholder schemas and occupational segregation, gender stereotypes also exert negative effects on women. Schein describes gender stereotyping as "the belief that a set of traits and abilities is more likely to be found among one sex than the other" (1978, p. 259). Gender stereotyping appears to be prevalent among the military, where the men far outnumber the women. For example, a common stereotype that is frequently voiced by both participants and instructors in combat training centres and battle schools is that women are not interested, motivated, or capable of being in the combat arms (Davis & Thomas, 1998; National Defence Minister's Advisory Board, 2000; Truscott, 1997). These types of beliefs are common in military environments as evidenced by research with, for example, cadets from the US Air Force Academy. This research has shown that male cadets perceive female cadets to be less motivated, dedicated, physically fit, diligent, confident, trustworthy, leader-like, and effective than male cadets are (DeFluer & Gillman, 1978; Larwood, Glasser & McDonald, 1980).

Similarly, Boyce and Herd (2003), in their study of undergraduate military service college students, found that men perceived military leaders as possessing characteristics more commonly ascribed to men, whereas women did not. Both high and low performing men made these attributions. Moreover, senior-level male cadets showed stronger masculine stereotypes of successful officers than freshmen male cadets did. Interestingly, women cadets demonstrated a different pattern. The perceptions that successful female performers had about successful military leadership included traits commonly ascribed to both men and women, whereas lower performing women described successful military leadership in feminine terms. Military women appear to be very aware of the stereotyping that occurs. Women cadets at West Point, for example, have reported feeling "stereotyped into limited feminine roles that conflicted with expectations for cadets" and also reported that they were "being criticized for lacking 'command voices'" (Yoder, 2002, p. 2).

5.1.5 Negative Attitudes and Biased Evaluations of Performance

Gender stereotyping can result in both negative attitudes toward women leaders and biased evaluations of their performance. A meta-analysis by

Eagly, Karau, and Makhijani (1995) indicates that although women and men leaders do not differ in effectiveness, women are evaluated more negatively than men under certain circumstances. This bias is much more pronounced when the evaluators are men and when leadership is carried out by women using stereotypically masculine styles (i.e., autocratic and nonparticipative). Additionally, women are devalued more when leaders occupy male-dominated roles and in settings where leadership is defined in highly masculine terms, such as the military.

Several studies have provided support for such a stance. In their investigation of the attitudes held by undergraduate men and women in the United States Naval Academy, United States Air Force Academy, Reserve Officer Training Corps (ROTC), and a civilian university, Kurpius and Lucart (2000) found military students to have the most traditional authoritarian beliefs and gender-role attitudes, with military-affiliated men holding more traditional toughness attitudes than civilian men. Kimmel (2000), in studying the Virginia Military Institute and the Citadel, found that although women performed as well as men, men felt unwilling or unable to perform adequately with a woman next to them. Such a finding illustrates the potential impact of unfounded stereotypes. When Siskind and Kearns (1997) investigated gender bias in the ratings of female faculty at The Citadel, they found that faculty women perceived gender bias as part of the institutional culture. These women believed that the traits or behaviours that would be accepted in men were not easily accepted in women. In addition, students were found to behave in a less disciplined manner in the classes of female faculty, but claimed to be most comfortable in women's classes (Siskind & Kearns, 1997).

Palmer and Lee (1990) examined the acceptance of women in traditionally male-dominated blue-collar civilian jobs in the military. Male supervisors reported that they would not treat female employees differently from male employees. In contrast, male coworkers indicated that they would treat male coworkers more favorably than female coworkers. Supervisors also reported more favorable attitudes than male coworkers toward women employees. Rice, Yoder, Adams, Priest, and Prince (1984) investigated leadership ability ratings for cadets at the US Military Academy for gender differences. They found that men were rated significantly higher on leadership ability than women for two out of three rating periods. However, in their investigation of US Military Academy Cadets in leader and trainee roles, Adams, Rice, and Instone (1984) suggest that attitudes toward the role of women in the Army do not introduce a consistent and strong bias in the way male and female cadets are judged by either their subordinates or superiors in field settings. The researchers indicate that the long-term duration and intensity of the leader-follower interactions in their study may be a key difference in accounting for the results. In their study, leaders and followers interacted very frequently over a period of several weeks and got to know each other well as a result. The researchers maintain that other studies, which have yielded bias effects, have either been based on short-term laboratory interactions or hypothetical situations.

Several other studies have examined the challenges of integrating women into the military. Diamond and Kimmel (2000) contend that the negative attitudes held by men were the primary obstacle to the effective integration of women cadets into the Virginia Military Institute. Larwood, Glasser, and McDonald (1980) examined the attitudes that male and female army ROTC cadets had toward the integration of women into nontraditional and leadership positions within the military. Not surprisingly, women had more favorable attitudes than men.

Boldry, Wood, and Kashey (2001) investigated the stereotypes and evaluations of individual cadets enrolled in the Texas A&M Corps of Cadets training program. They found that male cadets were more likely to be viewed as leader-like and motivated, whereas women were believed to possess more feminine attributes that hindered effective performance in the military. These evaluations of male and female cadets demonstrate the influence of gender stereotypes, as there were no sex differences on objective measures of performance. As described by the researchers, women's token status in military training programs heightens the salience of gender-role stereotypes and often leads them to receive less favorable evaluations. However, integration did increase favorable perceptions of women and women were perceived as less masculine and more feminine in integrated than non-integrated outfits.

Many of the constraints discussed above have hindered the progression of women into military leadership positions. These factors not only create a "chilly climate" for women, but also foster stereotyped decision-making and systemic discrimination and bias (Haslett, Geis, & Carter, 1993). As a result, women's career advancement is hampered and their ability to legitimize their authority is compromised. Women leaders in the military find themselves in a double bind in that military service is gender conforming for men and not for women. To the extent that women are successful in the military, they cannot be "real" women, but to the extent that they are successful in fulfilling their feminine role, they cannot conform to the military ideal (Kimmel, 2000). One way around this paradox is for women to adopt an androgynous identity, and indeed, women who are androgynous appear to be more successful than those who are not under such circumstances (Korabik, 1993). Moreover, the most effective way for women to legitimize their authority is by tempering their task-oriented, dominant, or competitive behaviours with a person-orientation and a focus on cooperation (Ridgeway, 1992). Kimmel (2000) found that some female West Point cadets did this by strategically asserting their traditional femininity in social situations, but downplaying it in professional situations. Similarly, Yoder (2001) suggests that transformational leadership creates a congenial context for the expression of women's effective leadership. However, Yoder (2001) cautions that a critical point men and women need to consider is when it would be appropriate, given the organizational context, to rely on transformational leadership.

Still, caution must be exercised when putting forth prescriptions as to what styles of leadership behaviour will be most effective for women. These may very well depend on complex interactions that depend on the gender composition of the leader-subordinate dyad or on the organizational context (male-dominated vs. gender balanced). Certainly, more research is needed to investigate the impact of such factors on the ability of women leaders to be effective. For example, recent research (Bast, Ayman, & Korabik, 1996) has indicated that men and women subordinates may evaluate women leaders who employ a transformational style very differently. The expected positive relationship between a woman leader's transformational leadership behaviour and her subordinate's ratings of her effectiveness was found when the ratings were made by women subordinates. However, men subordinates rated women leaders who were high in transformational leadership as less effective than they rated women leaders who were low in transformational leadership. Clearly, more research is needed about what types of leadership styles and behaviours work best for women under differing circumstances.

6. Conclusion

This review has examined leadership in the context of the military. An overview has been provided of the results of research relating to several characteristics that have been shown to be associated with effective leadership. In particular, multiple intelligences (i.e., practical, social, and emotional intelligence), behavioural flexibility, and androgyny were examined as they related to both task- and person-oriented leadership styles and to transformational leadership behaviour. In addition, issues pertaining specifically to the role of women in the military were discussed. These included explications of the role of organizational culture and tokenism in creating a climate that fosters the negative stereotyping and occupational segregation of women. The effect of these dynamics and their impact on women's leadership was also addressed. Future research should examine the different ways in which various leadership attributes may play out for women and men in different organizational settings, including the military context. Such work may have important implications for the recruitment, selection, and development of military leaders.

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(U) This report consists of a review of the literature on effective leadership within the context of the military. More specifically, task−oriented, person−oriented, and transformational leadership are discussed as they pertain to some of the personal characteristics (i.e., androgyny, multiple intelligences, and behavioural flexibility) possessed by effective leaders. A consideration of gender implications and military culture provides a framework within which such personal attributes can be contextualized. The utility of such a conceptualization lies within its ability to consider a multitude of variables in the assessment of effective military leadership.

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